

Appendix C

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

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)	
In the Matter of)	
)	
Federal-State Joint Board on Universal)	CC Docket No. 96-45
Service)	
)	
High Cost Universal Service Support)	WC Docket No. 05-337
_____)	

Declaration of Harold W. Furchtgott-Roth

March 27, 2006

Summary

I have been asked by Puerto Rico Telephone Company, Inc. (PRT), within the context of the Communications Act and Commission rules, to review and evaluate the economic interpretations of “insular” and “high cost” for purposes of this proceeding and to evaluate the effects of current universal service mechanisms in Puerto Rico.¹ I reach the following conclusions:

1. Economics is useful in the interpretation of statutory language;
2. Under current universal service programs, telephone penetration rates in Puerto Rico have declined rather than increased;
3. Current low income federal universal service programs have not favored Puerto Rico;
4. Current high cost universal service programs have not fully reflected the high cost of service in Puerto Rico;
5. In the NPRM, the Commission has reasonably declined to use the high cost model for insular universal service; and
6. Developing a new cost model for insular areas would be unwise.

¹ See *Federal-State Joint Board on Universal Service*, Notice of Proposed Rulemaking, CC Docket No. 96-45, WC Docket No. 05-337 (Dec. 9, 2005) (“Notice”).

I. Introduction

A. Qualifications

My name is Harold W. Furchtgott-Roth. Since 2003, I have been president of Furchtgott-Roth Economic Enterprises, an economic consulting firm. I have consulted on a variety of topics, including both regulatory and antitrust matters. I am chairman of the board of the Telecommunications Policy Research Conference, one of the primary forums for research on telecommunications issues in the United States. I chair the board of Oneida Partners, a wireless communications company. I am on the board of MRV, a publicly traded telecommunications manufacturing company. I serve on several advisory boards.

From June 2001 through March of 2003, I was a visiting fellow at the American Enterprise Institute for Public Policy Research (AEI) in Washington, DC. At AEI, I completed the manuscript for a book, *A Tough Act to Follow: The Telecommunications Act of 1996 and the Separation of Powers*, recently published by the AEI Press.

I was a Commissioner of the Federal Communications Commission (FCC) from November 1997 through the end of May 2001. I was a member of the Federal-State Joint Board on Universal Service. My statements as a Commissioner at the FCC have been cited by federal courts.

I have worked for many years as an economist. From 1995 to 1997, I was chief economist of the House Committee on Commerce where I served as one of the principal staff members helping to draft the Telecommunications Act of 1996.

My academic research concerns economics and regulation. In addition to the book on the Telecommunications Act of 1996, I am the coauthor of three books: *Cable TV: Regulation or Competition*, with R.W. Crandall, (Washington, DC: The Brookings Institution), 1996; *Economics of A Disaster: The Exxon Valdez Oil Spill*, with B.M. Owen, D.A. Argue, G.J. Hurdle, and G.R. Mosteller, (Westport, Connecticut: Quorum books), 1995; and *International Trade in Computer Software*, with S.E. Siwek, (Westport, Connecticut: Quorum Books), 1993. I am a frequent commenter on matters before the Federal Communications Commission, and daily newspapers, including the *Wall Street Journal*, have published my opinion pieces. I have a regular column in the business section of the *New York Sun*. I have testified on many occasions before committees of the U.S. Senate and House of Representatives. I received my undergraduate training at MIT, and I received a Ph.D. in economics from Stanford University. My resume is attached as Attachment A.

B. Purpose of This Reply Declaration

I have been asked by PRT, within the context of the Communications Act and Commission rules, to review and evaluate the economic interpretations of “insular” and “high cost” for purposes of this proceeding.

C. Findings

With respect to the issue of insular universal service, I find the following:

1. Economics is useful in the interpretation of statutory language;
2. Under current universal service programs, telephone penetration rates in Puerto Rico have declined rather than increased;
3. Current low-income federal universal service programs have not favored Puerto Rico;
4. Current high cost universal service programs have not fully reflected the high cost of service in Puerto Rico;
5. In the NPRM, the Commission has reasonably declined to use the high cost model for insular universal service; and
6. Developing a new cost model for insular areas would be unwise.

II. Economics is useful in the interpretation of statutory language

Economics can be useful in helping the Commission interpret statutory language, including Section 254 on universal service. In this context, the proper role of economics in a government agency is not to ask: “What should the law be?” but rather to ask: “Given statutory language, how best can rules and policies be economically structured while giving full and rational meaning to statutory language?” In the case of universal service, Section 254 gives the Commission specific statutory and policy instructions. Still, there are certain words within Section 254, such as “insular” and even “high cost” that have eluded clear interpretations. To these, economics may offer some illumination.

A. Statutory definitions

Section 254 instructs the Commission on universal service principles and mechanisms including the following

(b) UNIVERSAL SERVICE PRINCIPLES.--The Joint Board and the Commission shall base policies for the preservation and advancement of universal service on the following principles:

....

(3) ACCESS IN RURAL AND HIGH COST AREAS.--Consumers in all regions of the Nation, including low-income consumers and those in rural, *insular*, and high cost areas, should have access to telecommunications and information services, including interexchange services and advanced telecommunications and information services, that are reasonably

comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas.²

Although the Commission has previously defined both “high cost” and “rural,” ten years after the passage of the Telecommunications Act of 1996, the Commission has yet to define “insular.”

In 1999, the Commission proposed a definition of insular areas as:

Accordingly, we propose the following definition of insular areas: “islands that are territories or commonwealths of the United States.” By including the phrase ‘territories or commonwealths,’ we intend to restrict the definition to areas that are populated islands that have a local government. We also observe that the proposed definition comports with publications of the Department of Interior’s Office of Insular Affairs (OIA) and various provisions of the United States Code.³

Such a definition would likely lead to the following territories being considered insular: Puerto Rico, American Samoa, CNMI, Guam, and the U.S. Virgin Islands.⁴

B. Economic factors distinguishing insular from other areas

The Commission observed that low income and other impediments to telephone penetration are compounded by other factors in insular areas:

Further, we note that insular areas generally have subscribership levels that are lower than the national average, largely as a result of income disparity, compounded by the unique challenges these areas face by virtue of their locations.⁵

The Commission has long noted the differences between insular and other areas with respect to universal service:

² 47 U.S.C. § 254(b) (emphasis added).

³ *Federal-State Joint Board on Universal Service: Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, Further Notice of Proposed Rulemaking, 14 FCC Rcd 21177, ¶ 137 (1999) (“*Unserved Areas NPRM*”) (footnotes omitted).

⁴ *Id.*, ¶ 138.

⁵ *Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, ¶ 112 (1997) (“*First Report and Order*”). Particularly interesting is footnote 246 of that Order:

See, e.g., Puerto Rico Tel. Co. comments at 15 (national median income is 3.54 times higher than the Puerto Rico median income); CNMI NPRM comments at 9 (per capita income and telephone penetration rate in the Commonwealth of Northern Marianas Islands (CNMI) are among lowest in the nation); Puerto Rico Tel. Co. comments at 25-26 (factors such as tropical climate, high cost of shipping and topography contribute to high cost of providing service to insular areas); CNMI NPRM comments at 6 (telecommunications services are essential in CNMI because the islands’ distance from the U.S. mainland impedes travel and mail delivery).

In the *First Report and Order*, the Commission stated it would seek further comment in a subsequent proceeding on universal service issues affecting insular areas. The Commission recognized that, while insular areas will benefit from the federal universal service support mechanisms, insular areas may face unique problems that could limit their ability to participate in and benefit from all of the universal service programs. In particular, the Commission expressed concern about the low subscribership levels in insular areas, including Puerto Rico, and the potential need to tailor universal service support for both rural health care providers and telecommunications carriers in insular areas.⁶

The federal government collects and disseminates information for almost every conceivable category of information related to universal service on at least an annual basis. For example, the Bureau of Economic Analysis annually measures economic activity by various geographies, and the Commission monitors telephone penetration rates and a wealth of information on telephony service at least annually. Practically all of this detailed economic information, however, is limited to the 50 states and the District of Columbia and does not include the territories under consideration for insular status.

In the *Unserved Areas NPRM*, the Commission relies on information supplied by commenters for each potential insular area rather than information available from federal agencies. Part of the reason the Commission may be slow in developing a final definition of insular regions is the absence of relevant and comparable information. Insularity appears to be related to a paucity of governmental information. In considering universal service including for insular areas, the Commission has focused on several economic factors including: telephone penetration rates, income, affordability, and cost of service.⁷ For each of these factors, the Commission has less information for insular areas including Puerto Rico than for the states.

III. Under current universal service programs, telephone penetration rates in Puerto Rico have declined rather than increased

One of the simplest criteria for universal service is telephone penetration.⁸ The Commission monitors telephone penetration rates at least three times per year but only in each of the 50 states.⁹ The Commission's measure of telephone penetration rates is

⁶ *Unserved Areas NPRM*, ¶ 135 (footnotes omitted).

⁷ *See id.*, ¶¶ 135-38.

⁸ *See* 47 U.S.C. § 254(c)(1) (“Universal service is an evolving level of telecommunications services that the Commission shall establish periodically under this section. . . . The Joint Board in recommending, and the Commission in establishing, the definition of the services that are supported by Federal universal service support mechanisms shall consider the extent to which such telecommunications services-- . . . (B) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers.”).

⁹ *See, e.g., FCC, Telephone Subscribership in the United States: Data Through March 2005* (May 2005) (“*May 2005 Subscribership Report*”).

neutral with respect to wireline or wireless services.¹⁰ The Commission maintains no systematic information on telephone penetration in Puerto Rico or other areas that the Commission has designated as potential insular areas.¹¹ The simple fact that the Commission does not maintain telephone penetration information on these areas is indicative that they are different from other areas of the United States.

Table 1 presents the telephone penetration rates for selected states in November 1983 and March 2005. The states presented were one of the top 3 states in terms of telephone penetration in either November 1983 or March 2005. Table 1 also presents the bottom 3 states in terms of telephone penetration in either November 1983 or March 2005.

Table 1

Telephone Penetration Rates for Potential Insular Areas and Other Areas

	November 1983	November 1983 Rank (including the District of Columbia)	March 2005	March 2005 rank (including the District of Columbia)
U.S. average	91.4		92.4	
Alaska	83.8	49	95.2	9
Arkansas	88.2	42	87.7	50
Connecticut	95.5	3	92.7	29
Illinois	95.0	8	89.1	49
Maryland	96.3	2	93.5	23
Minnesota	96.4	1	95.6	5
Mississippi	82.4	50	86.7	51
South Carolina	81.8	51	93.2	27
Utah	90.3	32	96.9	2
Vermont	92.7	22	96.7	3
Washington	92.5	24	96.9	1
Puerto Rico	43.6	52	64.8*	52

* 2004 information. Puerto Rico penetration is a wireline penetration figure for Puerto Rico Telephone Company.

Sources: FCC, *Telephone Subscribership in the United States, Data Through March 2005*, Table 2 (May 2005) (“*May 2005 Subscribership Report*”); “Telephone Penetration per 100 Households,” Information provided by PRT.

Several trends emerge from Table 1. First, state average telephone penetration rates remain above 80 percent throughout the more than 20-year span. Second, the rank

¹⁰ *Id.* at 2 n.2.

¹¹ *Id.* at 3.

ordering of states in terms of telephone penetration is not stable. Thus, Illinois, which ranked 8th in 1983, fell to 49th by 2005. Utah ranked 32nd in 1983 but 2nd in 2005. But throughout the period, no state has a telephone penetration rate below 80 percent. In contrast, compared with the states, Puerto Rico's telephone penetration is consistently low, and Puerto Rico would be ranked consistently lower than any state.¹² In discussing the low penetration rates in insular areas, the Commission has particularly noted the low penetration rates in Puerto Rico, describing it in 1999 as 72 percent.¹³

Under the system of universal service before the Telecommunications Act of 1996, wireline penetration rates in Puerto Rico were consistently increasing. Table 2 presents the wireline penetration rates in Puerto Rico between 1980 and 2004. Notice that the peak year was 1997, the last year under the universal service system that was replaced by current programs under Section 254.

Table 2
Telephone Penetration Rates in Puerto Rico: 1980 – 2004
In Percentages

Year	Penetration rate	Year	Penetration rate	Year	Penetration rate
1980	38.3	1988	61.6	1996	73.7
1981	39.8	1989	64.2	1997	76.4
1982	40	1990	65.4	1998	74.8
1983	43.6	1991	66.5	1999	74.4
1984	47.1	1992	68.5	2000	74.4
1985	50	1993	70.1	2001	72.8
1986	52.8	1994	71	2002	71.4
1987	56.3	1995	71.9	2003	69.2
				2004	64.8

Source: PRT

If the purpose of Section 254 is to promote wider access to telephone services and if Section 254 applies equally to Puerto Rico as to other areas of the United States, programs to implement Section 254 in Puerto Rico have not yet been successful. Wireline penetration rates in Puerto Rico today are much *lower* than they were in 1996. The decline in wireline penetration rates began in 1998, the first full year under the Commission's new universal service program. Although other factors may influence penetration rates in Puerto Rico, the current USF rules clearly are not improving penetration rates in Puerto Rico, much less are they remedying a substantial decline.

¹² See Letter from Nancy J. Victory, Counsel for PRT, to Jeffrey Carlisle, Chief, Wireline Competition Bureau, FCC, CC Docket 96-45, Exhibit B (Nov. 4, 2004) ("*PRT Letter*"). Although the numbers presented by PRT are for different years and may be calculated in a slightly different manner from those presented by the FCC, there is little basis to believe that wireline penetration in Puerto Rico has ever exceeded that of any state.

¹³ *Unserved Areas NPRM*, ¶ 5 n.20.

The federal universal service program that began in 1998 was quite different from the program it replaced. The new universal service program resulted both in fewer federal dollars for Puerto Rico and in a much smaller share for Puerto Rico of the total federal universal service budget. Direct high-cost loop support disappeared entirely by 2004. For the years since 1998, Table 3 displays federal universal service payments to Puerto Rico and telephone penetration rates for the years 1998-2005.

Table 3
Federal Universal Service Support and Telephone Penetration Rates in Puerto Rico
1998-2005

	1998	1999	2000	2001	2002	2003	2004	2005
High Cost loop support funds in Puerto Rico (in \$millions)*	47.7	44.2	50.6	21.0	1.4	3.3	0.0	0.0
Total High Cost and Low Income Federal Universal Service Funds in Puerto Rico (in \$millions)*	138.9	133.5	141.5	119.1	103.2	110.0	126.5	122.2
Puerto Rico Share of Total Federal Universal Service Funds	6.45%	6.07%	5.14%	3.75%	2.86%	2.77%	2.98%	2.72%
PRT High Cost and Low Income Federal Universal Service Funds (in \$millions)*	138.9	133.0	139.9	112.5	92.26	94.9	87.8	74.48
PRT Capital Expenditure in Outside Plant (in \$millions)#	101.4	140.2	74.9	91.9	70.5	67.6		
Telephone Penetration in Puerto Rico#	74.80%	74.40%	74.40%	72.80%	71.40%	69.20%	66.90%	
Telephone Penetration Rate in United States**	94.10%	94.40%	94.40%	95.10%	95.10%	95.20%	93.80%	92.40%

Sources: * See FCC, *Universal Service Monitoring Report*, CC Docket No. 98-202 (2005) (“2005 Monitoring Report”).

See PRT Letter, Exhibit B.

** May 2005 *Subscribership Report*, Table 1.

Table 3 reveals several trends in the period 1998-2005.

- Despite having lower penetration rates than any of the 50 states, total Universal Service Fund payments to Puerto Rico declined from approximately \$140 million annually to \$120 million annually.
- Over a period of eight years, Puerto Rico’s share of federal universal service support declines from more than 6 percent to consistently less than 3 percent.
- During the period 1998-2004, while Puerto Rico’s share of federal universal service support fell by 50%, the wireline penetration rate in Puerto Rico fell by more than 10 percent.
- Current federal universal service rules have not remedied the substantial decline in penetration rates in Puerto Rico. Although other factors may influence penetration rates, the correspondence between universal service fund payments for high-cost and low-income programs and the penetration rates in Puerto Rico is difficult to ignore.
- PRT’s capital expenditures in outdoor plant and equipment appears to be strongly related to federal universal service payments for high-cost and low-income programs, which fell from 100% of those in Puerto Rico as recently as 1998 to

less than 61% in 2004. The ratio of capital expenditures in outdoor plant and equipment to federal universal service support for both high-cost and low-income programs ranges from 70 to 80 percent in most years.¹⁴ Although capital expenditures in plant and equipment likely affects telephone penetration rates, the pattern of investments appears to be influenced by the availability of federal universal service funds.

IV. Current low-income federal universal service programs have not favored Puerto Rico

Lifeline and Link Up are two federal universal service fund programs aimed at low-income households and intended to increase telephone penetration rates. Puerto Rico accounts for approximately 1.3 percent of the population of the United States¹⁵ and is a disproportionately impoverished region.¹⁶ For the five years from 2000 – 2004, Puerto Rico received substantially less than one percent of either Lifeline or Link Up funds targeted at low-income households.¹⁷ Although current federal universal service programs may target poverty, that targeting is not fully reflected in federal universal service fund payments to Puerto Rico.

V. Current high cost universal service programs have not fully reflected the high cost of service in Puerto Rico

Another criterion for universal service is cost of service.¹⁸ The Commission considers “cost of service” in different ways for different portions of universal service, but not in a consistent or comprehensive manner. For small carriers, the Commission looks to *actual* costs, based on accounting information, to evaluate universal service. For other carriers,¹⁹ the Commission looks to *hypothetical* costs, based on models that forecast costs, to determine universal service requirements. The Commission does compile and disseminate information on accounting-based non-traffic sensitive (NTS) cost of local service. Table 4 presents these monthly costs for states and other regions for the years 1999-2003.

¹⁴ If investments and universal service support are combined in the two outlying years (1999 and 2000), the ratio again is between 70 and 80 percent.

¹⁵ See U.S. Census Bureau, IDB Summary Demographic Data for Puerto Rico, *available at* <http://www.census.gov/cgi-bin/ipc/idbsum.pl?cty=RQ> (last visited Mar. 23, 3006).

¹⁶ See citations in *Unserved Areas NPRM*.

¹⁷ FCC, *Universal Service Monitoring Report*, CC Docket No. 98-202, Tables 2-8, 2-11 (2005) (“2005 Monitoring Report”).

¹⁸ See references to high cost in 47 U.S.C. § 254(b)(3).

¹⁹ The Commission’s distinction between small and other carriers is 100,000 access lines.

Table 4

Non-Traffic Sensitive Monthly Revenue Requirements Per Loop for Incumbent Local
Exchange Carriers in Different Jurisdictions in Recent Years

Ranked from Lowest to Highest in 2003

Rank	State District of	1999	2000	2001	2002	2003
1	Columbia	\$7.64	\$7.88	\$7.91	\$8.03	\$9.64
2	California	\$15.12	\$14.26	\$15.60	\$15.68	\$15.37
3	Illinois	\$14.89	\$15.82	\$16.09	\$16.56	\$17.21
4	Massachusetts	\$15.51	\$13.46	\$15.26	\$15.97	\$17.61
5	Nevada	\$15.97	\$16.78	\$17.16	\$17.33	\$17.68
6	Maryland	\$16.14	\$16.12	\$16.46	\$16.95	\$18.46
7	New Jersey	\$17.28	\$16.23	\$16.55	\$17.12	\$18.81
8	Rhode Island	\$17.21	\$16.36	\$16.95	\$17.60	\$18.87
9	Ohio	\$16.65	\$17.22	\$17.32	\$18.64	\$19.23
10	Connecticut	\$17.85	\$19.37	\$20.76	\$22.69	\$19.78
11	Pennsylvania	\$17.85	\$17.98	\$17.93	\$18.58	\$19.93
12	Iowa	\$17.91	\$18.25	\$18.53	\$18.56	\$20.13
13	Michigan	\$17.69	\$18.78	\$20.12	\$19.90	\$20.36
14	Indiana	\$18.09	\$18.65	\$18.16	\$19.35	\$20.41
15	North Marianas	\$40.04	\$39.66	\$30.89	\$26.63	\$20.42
16	New York	\$18.33	\$20.22	\$18.29	\$19.39	\$20.75
17	Wisconsin	\$17.85	\$18.51	\$19.23	\$21.42	\$21.81
18	Delaware	\$17.43	\$17.89	\$18.65	\$19.02	\$22.11
19	New Hampshire	\$20.72	\$20.84	\$20.93	\$20.77	\$22.47
20	Hawaii	\$18.91	\$18.66	\$20.75	\$21.32	\$22.59
21	Minnesota	\$18.82	\$19.85	\$20.65	\$21.21	\$22.60
22	Washington	\$20.66	\$21.62	\$21.83	\$22.40	\$23.43
23	Maine	\$22.46	\$21.23	\$22.60	\$22.13	\$23.57
24	Virginia	\$19.96	\$20.47	\$21.49	\$21.60	\$23.81
25	Florida	\$21.84	\$22.31	\$23.68	\$23.23	\$24.89
26	North Carolina	\$23.15	\$22.87	\$24.13	\$24.56	\$25.25
27	Utah	\$21.09	\$22.40	\$24.30	\$26.15	\$25.78
28	Tennessee	\$23.29	\$22.67	\$24.08	\$25.18	\$25.95
29	Oregon	\$23.66	\$22.15	\$23.72	\$25.10	\$26.34
30	Texas	\$22.66	\$23.76	\$25.19	\$26.85	\$26.54
31	Missouri	\$23.09	\$22.59	\$25.39	\$26.10	\$26.75
32	Oklahoma	\$22.81	\$23.13	\$25.98	\$27.28	\$27.34
33	Vermont	\$24.89	\$24.13	\$25.46	\$25.36	\$27.56
34	Nebraska	\$21.97	\$22.27	\$24.59	\$24.79	\$27.57
35	Alabama	\$22.73	\$22.03	\$24.22	\$25.75	\$27.58
36	Idaho	\$24.96	\$24.72	\$25.56	\$26.69	\$27.77
37	Louisiana	\$25.15	\$24.35	\$25.90	\$27.17	\$28.15
38	New Mexico	\$27.17	\$26.31	\$26.32	\$27.53	\$28.52
39	North Dakota	\$23.21	\$26.44	\$26.84	\$27.14	\$28.98
40	West Virginia	\$27.98	\$27.96	\$28.44	\$28.21	\$29.04

41	Kentucky	\$25.15	\$25.57	\$26.24	\$28.20	\$29.44
42	South Carolina	\$26.59	\$26.08	\$27.73	\$28.62	\$29.82
43	Colorado	\$26.16	\$27.34	\$28.40	\$29.14	\$29.83
44	Arizona	\$24.76	\$25.90	\$27.35	\$27.84	\$29.91
45	Georgia	\$25.38	\$25.68	\$28.08	\$29.23	\$30.07
46	Kansas	\$26.05	\$26.23	\$27.87	\$30.02	\$30.79
47	Montana	\$30.54	\$28.76	\$29.33	\$30.34	\$31.76
48	Puerto Rico	\$40.11	\$34.71	\$34.62	\$34.42	\$32.59
49	South Dakota	\$23.92	\$26.27	\$27.73	\$29.19	\$32.59
50	Arkansas	\$29.41	\$31.42	\$33.79	\$33.36	\$33.14
51	Mississippi	\$29.43	\$29.09	\$31.19	\$32.91	\$33.60
	American					
52	Samoa	\$24.94	\$22.48	\$24.79	\$36.70	\$37.17
53	Guam	\$24.78	\$23.73	\$27.90	\$27.53	\$37.56
54	Wyoming	\$38.13	\$36.86	\$36.10	\$37.11	\$38.83
55	Alaska	\$32.19	\$32.97	\$33.66	\$37.23	\$38.88
56	Virgin Islands	\$56.16	\$55.66	\$50.74	\$51.71	\$51.05
	Industry	\$19.99	\$20.20	\$21.07	\$21.77	\$22.57

Source: 2005 *Monitoring Report*, Table 3-21.

With the exception of the Northern Marianas, all of the areas that the Commission considered in 1999 for insular status had average NTS loop costs in 2003 that are well above the national average of \$22.57. Indeed, in 1999, all of the insular regions were well above the national average. Puerto Rico, for example, at \$32.59, is more than \$10 above the average monthly rate, or more than \$120 annually above the average annual rate. Only five states—South Dakota, Arkansas, Mississippi, Wyoming, and Alaska—had higher NTS loop costs.

Despite having among the highest loop costs in the country, Puerto Rico receives no federal universal service support for high loop costs either through the rural carrier high cost fund or the non-rural carrier high cost fund.²⁰ Puerto Rico receives other forms of high cost universal service support, but this support does not directly reflect loop costs. Most of the support is for lost access charge revenue through Interstate Common Line support.

Table 5 presents the total federal high cost universal service support by state in 1998 and 2005 of the growth of high cost support between the two time periods. Nationally, high cost support grew by more than 100 percent. Only Puerto Rico, New Jersey, and NMIC had a decline in high cost federal universal service support during this period.

²⁰ 2005 *Monitoring Report*, Tables 3-6, 3-9.

Table 5
Total High Cost Federal Universal Service Support (in dollars)
By State in 1998 and 2005

	1998	2005	Percentage Change
Alabama	38,830,293	109,517,175	182.04%
Alaska	64,131,034	117,590,943	83.36%
American Samoa	0	2,153,855	
Arizona	32,845,473	77,564,361	136.15%
Arkansas	68,338,557	148,887,585	117.87%
California	52,643,600	95,755,252	81.89%
Colorado	43,928,578	77,930,147	77.40%
Connecticut	1,212,720	2,238,580	84.59%
Delaware	0	267,078	
District of Columbia	0	0	
Florida	20,036,950	90,854,909	353.44%
Georgia	74,656,229	110,100,287	47.48%
Guam	1,006,872	17,847,923	1672.61%
Hawaii	286,766	30,401,355	10501.45%
Idaho	28,885,473	55,164,697	90.98%
Illinois	22,589,490	60,521,346	167.92%
Indiana	16,278,436	57,624,438	253.99%
Iowa	25,990,409	86,529,354	232.93%
Kansas	59,007,494	157,502,370	166.92%
Kentucky	24,460,486	78,368,719	220.39%
Louisiana	65,332,257	105,912,621	62.11%
Maine	18,175,357	29,318,775	61.31%
Maryland	569,028	4,135,188	626.71%
Massachusetts	489,687	3,158,045	544.91%
Michigan	31,188,240	52,980,051	69.87%
Minnesota	37,439,032	109,644,563	192.86%
Mississippi	26,793,296	207,429,069	674.18%
Missouri	47,215,940	91,509,315	93.81%
Montana	42,065,201	75,543,747	79.59%
Nebraska	19,868,058	54,841,116	176.03%
Nevada	10,462,430	30,592,460	192.40%
New Hampshire	8,487,987	9,679,157	14.03%
New Jersey	2,976,024	1,281,699	-56.93%
New Mexico	33,552,080	54,984,129	63.88%
New York	35,363,672	51,172,524	44.70%
North Carolina	40,762,084	80,397,033	97.23%
North Dakota	21,101,916	60,020,074	184.43%
NMIC	4,236,713	1,068,922	-74.77%
Ohio	14,040,836	39,165,091	178.94%
Oklahoma	59,502,768	116,051,616	95.04%
Oregon	35,755,689	72,623,487	103.11%
Pennsylvania	22,169,364	65,143,481	193.84%
Puerto Rico	138,864,798	110,392,005	-20.50%

Rhode Island	0	56,379	
South Carolina	44,424,832	79,302,436	78.51%
South Dakota	16,924,254	69,053,899	308.02%
Tennessee	27,395,910	57,272,367	109.05%
Texas	123,089,671	224,931,831	82.74%
Utah	9,928,920	24,399,500	145.74%
Vermont	12,539,982	31,055,457	147.65%
Virgin Islands	16,199,322	24,759,986	52.85%
Virginia	12,440,891	83,650,680	572.38%
Washington	40,942,959	86,724,342	111.82%
West Virginia	24,421,006	66,930,401	174.07%
Wisconsin	49,669,554	126,170,556	154.02%
Wyoming	20,786,386	55,972,238	169.27%
Industry	1,690,305,004	3,734,144,616	120.92%

Source: 2005 Monitoring Report, Table 3-14.

There are many methods to examine high cost universal service support, but all of these methods lead to the conclusion that Puerto Rico is receiving declining revenue and a substantially declining share of universal service support while the vast majority of other states receive increasing high cost support. This result stands in stark contrast to the relatively high non-traffic sensitive cost structure for telephony in Puerto Rico.

VI. In the NPRM, the Commission has reasonably declined to use the high cost model for insular universal service²¹

The Commission has examined the basis for a separate insular universal service program²² and tentatively concluded in the NPRM to use actual costs rather than a cost model for purposes of examining insular universal service.

We tentatively conclude that section 254(b) provides the Commission with the authority to establish a new interim support mechanism for non-rural insular areas based on embedded costs. We seek comment on this tentative conclusion. We agree with PRT that, through section 254(b), Congress intended that consumers in insular areas, as well as in rural and high-cost areas, have access to affordable telecommunications and information services. We believe that the low penetration rates in Puerto Rico demonstrate that this goal is not being met and that the Commission could be doing more to help the residents of Puerto Rico. Because of the unique challenges in providing telephone service in Puerto Rico, we believe that a special support mechanism, in combination with the Commission's low-income program, will help to combat the problem of low subscribership in Puerto Rico. The evidence provided by PRT[] supports a finding that there appears to be a correlation between the recent decline in Puerto Rico's

²¹ Over the years, I have expressed skepticism about the efficacy of the Commission's high cost model. See, e.g., *Federal-State Joint Board on Universal Service; Forward Looking Mechanism for High Cost Support for Non-Rural LECs*, Tenth Report and Order, 14 FCC Rcd 20156 (1999) ("*Tenth Report and Order*"), Dissent of Comm'r Furchtgott-Roth. I prepare these remarks to explain that, even though it may be useful for other purposes, the Commission's high cost model is inappropriate for the calculation of insular universal service programs.

²² Notice, ¶¶ 30-38.

subscriber rates and the reduction of Puerto Rico's high-cost support. Although we tentatively conclude that an interim insular mechanism is the appropriate measure to help reverse this trend, we seek comment on this tentative conclusion in particular and on the impact of high-cost support on subscriber rates in general. We also seek comment on how previous Commission decisions affect our tentative conclusion that we should establish a new interim support mechanism for non-rural insular areas based on embedded costs.²³

The Commission had the option instead to use the high-cost model for all universal service programs in insular areas.²⁴ The high-cost model was designed for various purposes other than estimating the peculiar costs of insular areas including non-rural insular areas such as Puerto Rico.

As long ago as 1997, Commissioner Chong observed that the high-cost model being developed by the Commission did not incorporate information from Puerto Rico or other insular areas.²⁵ In promulgating the non-rural high-cost model, the 209-page order issued by the Commission refers to Puerto Rico four times in the text.²⁶ Those references indicate that in January of 1999, the Commission did not have complete data for Puerto Rico and other regions to run the high-cost model. By July 1999, the Commission may have had more information.²⁷

Part of the *Tenth Order* includes a discussion of whether the Commission should rely on generic hypothetical information to run the high-cost model, or company-specific information. The Commission clearly decides to rely on generic information rather than company specific information:

While reliance on company-specific data may be appropriate in other contexts, we find that for federal universal service support purposes it would be administratively unmanageable and inappropriate. The incumbent LECs argue that virtually all model inputs should be company-specific and reflect their individual costs, typically by state or by study area. For example, GTE claims that the costs that an efficient carrier incurs to provide basic service vary among states and even among geographic areas within a state. GTE asserts that the only way for the model to generate accurate estimates, i.e., estimates that reflect these differences, is to use company-specific inputs rather than nationwide input values. As parties in this proceeding have noted, however, selecting inputs for use in the high-cost model is a complex process. Selecting different values for each input for each of the fifty states, the District of Columbia, and Puerto Rico, or for each of the 94 non-rural study areas, would increase the Commission's administrative burden significantly. Unless we simply accept the data the companies provide us at face value, we would have to engage in a lengthy process of verifying the reasonableness of each

²³ *Id.*, ¶ 33 (footnote omitted).

²⁴ This model was initially adopted in the *Federal-State Joint Board on Universal Service*, Ninth Report and Order and Eighteenth Order on Reconsideration, 14 FCC Rcd 20432 (1999).

²⁵ *First Report and Order*, at 9281 n.2331, Separate Statement of Comm'r Chong.

²⁶ *Tenth Report and Order*, ¶¶ 42, 92, 356.

²⁷ *Id.*, ¶ 42.

company's data. For example, in a typical tariff investigation or state rate case, regulators examine company data for one time high or low costs, pro forma adjustments, and other exceptions and direct carriers to adjust their rates accordingly. Scrutinizing company-specific data to identify such anomalies and to make the appropriate adjustments to the company-proposed input values to ensure that they are reasonable would be exceedingly time consuming and complicated given the number of inputs to the model.²⁸

The Commission does not suggest that company-specific information would lessen the accuracy of the high-cost model. Instead the Commission is concerned about the “Commission’s administrative burden.”²⁹ In the current proceeding, reliance on company-specific cost information would likely lessen, rather than increase, the administrative burden relative to a cost model.

It is possible that, averaged over hundreds of separate model runs reflecting different study areas for one large company, generic information applied to the Commission’s high-cost model would on average balance out. For companies operating in a limited geographic area, such as PRT, the likelihood that the model would balance out is remote. Indeed, the Rural Task Force (“RTF”) evaluated the Commission’s high-cost model in terms of its potential applicability to rural carriers.³⁰ The RTF found the Commission’s high-cost model to be inaccurate both in projecting the physical structure of the underlying network and in predicting actual costs.³¹ The RTF recommended against applying the high-cost model to rural carriers.³² At least in September 2000, the Commission did not have sufficient information for some insular areas to run the high-cost model.³³ RTF’s analysis hardly supports the application of the Commission’s high-cost model for insular regions:

To accomplish this analysis of the Synthesis Model, the Task Force conducted a detailed study of 23 sample companies. In addition, the Task Force compared model results with actual company data for 195 additional companies. Attempts were made to study a diverse group of companies in terms of size, geography and regions of the nation. Application of the FCC Synthesis model to the rural test companies produced the following results:

- The model lines differ significantly from actual lines served. While the model generally tends to underestimate lines, in about one-third of the wire centers it overestimated lines.

²⁸ *Id.*, ¶ 92 (footnotes omitted).

²⁹ *Id.*

³⁰ See Rural Task Force, “A Review of the FCC’s Non-Rural Universal Service Fund Method and the Synthesis Model for Rural Telephone Companies,” White Paper 4 (Sept. 2000).

³¹ *Id.* at 1-11.

³² *Id.*

³³ See *id.* at 15 (“In addition, Rural Carrier study area data was not available for 24 Alaskan study areas nor for the Rural Carrier study areas of Guam, the Virgin Islands and Micronesia.”).

- Comparisons of the number of route-miles of plant summarized in the model with actual data produced significant variations. Again, differences occur on both the high and low ends with a general tendency for the model results to overestimate the actual data. In 12 percent of the wire centers studied the model data overestimated route miles by more than 200 percent.

- Model results for the type of plant vary widely from actual plant constructed. The model generally tends to overestimate the percentage of aerial and underground plant, and underestimate the percentage of buried plant. This is likely due to the diverse character of the rural geography, and the use of a single set of inputs by density zone based on the experience of non-Rural Carriers.

- In calculating the applicable density zones, the model significantly underestimates wire center area. In 95 percent of wire centers the land area is understated, and in over one third of these the understatement exceeds 90 percent.

- It significantly underestimates COE Switching investment. This is likely due to the lack of economies of scale of the Rural Carriers, and the general tendency of the model to underestimate lines served.

- Model results for various elements of general support investment vary widely from actual data and from rational forward-looking assumptions, with almost as many cases of overestimation as underestimation.

- Network Operations and Corporate Operations expenses are significantly underestimated, again likely due to the lack of economies of scale of Rural Carriers.

The aggregate results of this study suggest that, when viewed on an individual rural wire center or individual Rural Carrier basis, the costs generated by the Synthesis Model are likely to vary widely from reasonable estimates of forward-looking costs. In fact, much of the data analysis suggests that the model results tend to be in the high and low extremes, rather than near the expected results for the area being analyzed. While it may be technically possible to construct a model with added precision and variables to account for the differences among Rural Carriers and between non-Rural Carriers and Rural Carriers, it is the opinion of the Task Force that the current model is not an appropriate tool for determining the forward-looking cost of Rural Carriers.³⁴

The high-cost model could be remedied in a specific application with better underlying data particularly company-specific information. The RTF considered recommending such improvements but ultimately decided that actual cost data are superior to the model results. The same conclusion can and should be reached for carriers in insular regions.

If the high-cost model performed poorly in a careful study of dozens of rural companies, there is no particular reason to assume that the model would perform well even for a non-rural carrier in Puerto Rico. David Blessing finds that the current high cost model performs extraordinarily poorly in comparison with actual PRT costs in Puerto Rico.³⁵

³⁴ *Id.* at 9-10.

³⁵ Declaration of David C. Blessing (attached as Appendix A).

VII. Developing a new cost model for insular areas would be unwise.

Perhaps because the current Commission cost model performs poorly, some may suggest developing a new cost model for insular areas. Developing a new cost model just for the purposes of insular areas would be unwise for several reasons.

First, given the heterogeneous nature of the proposed insular areas, a cost model that would accurately estimate costs for one insular area would not necessarily accurately estimate costs for a different insular area. The peculiarities of each insular area make it difficult to construct a common cost model.

Second, even if a reasonably accurate cost model for all insular areas could be constructed, it would likely take years to construct the model and to complete the necessary public notice and comment process. Ten years after the passage of the Telecommunications Act, the Commission has yet to address effectively insular universal service, and adoption of a cost model specific to insular areas would further delay completion of Commission action.

Third, even if an insular cost model for universal service could ultimately be constructed, potential litigation surrounding the model could further delay unambiguous use of the model. Some aspects of the application of the current Commission cost model were challenged successfully in court.³⁶

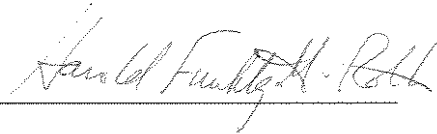
Finally, regulators including the Commission already collect information about the costs of providing services in insular areas. The availability of cost information to the Commission begs the question of why the Commission would go to the additional trouble to estimate information that is readily observed. The administrative burden on the Commission is likely to be less if it simply uses company-specific cost information.

VIII. Conclusion

Over the past decade, federal universal service fund programs have generally increased in the 50 states, and perhaps not coincidentally, telephone penetration rates in the 50 states have remained relatively constant. During the same period, federal high-cost universal service to Puerto Rico has declined substantially, wireline penetration in Puerto Rico has declined, and PRT's capital expenditures for outdoor plant and equipment has declined. The gap in penetration rates between Puerto Rico and the other 50 states has substantially widened, to the disadvantage of Puerto Rico consumers, since the implementation of current universal service programs under Section 254. The Commission has wisely decided to consider a federal insular universal service program that might address Puerto Rico. The calculation of support for an insular USF program should be based on actual costs, not on the current high-cost model.

³⁶ See, e.g., *Qwest Corp. v. FCC*, 258 F.3d 1191 (10th Cir. 2001).

I declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in cursive script, reading "Harold Furchtgott-Roth", written over a horizontal line.

Harold Furchtgott-Roth

Executed March 27, 2006

Attachment A

Curriculum Vitae of Harold Furchtgott-Roth

Harold W. Furchtgott-Roth

Office Address

Furchtgott-Roth Economic Enterprises
Suite 800
1200 New Hampshire Ave., N.W.
Washington, DC 20036
(202) 776-2032
hfr@furchtgott-roth.com

Home Address

2705 Daniel Road
Chevy Chase, MD 20815
(301) 229-3593

Experience

Furchtgott-Roth Economic Enterprises, President
(2003-present).

Economic consultant.
Business columnist, *New York Sun*, May 2004 –

present.

American Enterprise Institute, Visiting Fellow
(2001-2003).

Federal Communications Commission, Commissioner
(1997-2001).

One of five commissioners responsible for U.S. communications policy, rulemaking, enforcement, and adjudication. Among other responsibilities, reviewed all major mergers in communications sector. For statements, speeches, and other information, see

<http://www.fcc.gov/commissioners/previouscommish.html>

Committee on Commerce, U.S. House of Representatives,
Chief Economist, (1995-1997).

One of the principal staff for the
Telecommunications Act of 1996, Balanced Budget
Act of 1995, and electricity deregulation legislation
for the 105th Congress.

Economists Incorporated, Senior Economist (1988-1995).

Center for Naval Analyses, Research Analyst, (1984-1988).

Experience
Assistant (**continued**)

Stanford University, Research Assistant, and Teaching
for public finance, (1980-1983).

U.S. Department of Energy, Conservation and Renewable
Energy Program, Research Assistantship, (1981-1982).

Office of Management and Budget, Intern, (Summer 1980).

1979).
Congressional Budget Office, Assistant Analyst, (1978-

U.S. Department of Labor, Pension and Welfare Benefits
Program, Intern, (Summer 1977).

Assistant,
(1976-1978).

sponsored
U.S. Senate Committee on Appropriations, Internship
by MIT Political Science Department, (Summer 1976).

Education

Ph.D., Stanford University, Economics, 1986

1978.
S.B., Massachusetts Institute of Technology, Economics,

University of South Carolina, 1973-1974.

Honors

Awards for FCC achievements from various
civic and business groups

Visiting Fellow, University of Warwick, (Summer 1984).

Research Fellow, Brookings Institution, (1983-1984).

National Merit Scholar, MIT, (1974).

Professional Societies

American Economics Association
Econometrics Society
Federalist Society

Boards

Corporate

MRV Communications
Oneida Communications

Other

Washington Legal Foundation
Legal Policy Advisory Board
Telecommunications Policy Research Conference,
Chairman
University of Richmond School of Law
Intellectual Property Institute Advisory Board
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Universal Service Support for Non-Rural Carriers that Serve High Cost Areas, CC Docket No. 96-45. July 16, 1998.

Proposal to Revise Administrative Structure for Federal Universal Service Support Mechanisms; CC Docket No. 96-45. July 15, 1998.

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Universal Service. June 12, 1998.

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(continued)**

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Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission’s Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, To Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services. Petitions for Further Reconsideration of the Denial of Applications for Waiver of the Commission’s Common Carrier Point-to-Point Microwave Radio Service Rules. February 2, 1998.

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(continued)**

Streamlined Auction Rules. December 18, 1997.

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Revision of Universal Service Collection Amounts for 1998.
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Southwestern Bell Telephone Company, Tariff F.C.C. No. 73.
November 14, 1997.

Three Members of Permanent Staff Named. November 12, 1997.

Appendix D

Subpart L - Non-Rural Insular High-Cost Loop Support Mechanism

Add new subpart...

§ 54.1001 Eligibility

- (a) Non-rural insular high-cost loop support is available to non-rural insular incumbent local exchange carriers and/or eligible telecommunications carriers serving lines in the service area of non-rural insular incumbent local exchange carriers, as those terms are defined in § 54.5 of this chapter.

§ 54.1002 Calculation of Non-Rural Insular High-Cost Loop Support

- (a) For non-rural insular study areas reporting 200,000 or fewer working loops pursuant to § 36.611(h) the expense adjustment (additional interstate expense allocation) is equal to the sum of paragraphs (a)(1) through (2) of this section.
 - (1) Sixty-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 115 percent of the national average for this cost but not greater than 150 percent of the national average for this cost as calculated pursuant to § 54.1002(c) multiplied by the number of working loops reported in § 36.611(h) for the study area; and
 - (2) Seventy-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 150 percent of the national average for this cost as calculated pursuant to § 54.1002(c) multiplied by the number of working loops reported in § 36.611(h) for the study area.
- (b) For non-rural insular study areas reporting more than 200,000 working loops pursuant to § 36.611(h), the expense adjustment (additional interstate expense allocation) is equal to the sum of paragraphs (b)(1) through (4) of this section.

¹ PRT included a set of proposed rules governing the non-rural insular mechanism in its *Insular White Paper*. *PRT White Paper: Proposed Interim Insular Mechanism*, CC Docket No. 96-45 (May 6, 2005). This Appendix provides a complete set of rules revised to reflect additional components of a non-rural insular mechanism addressed in the Comments.

- (1) Ten percent of the study area average unseparated loop cost per working loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 115 percent of the national average for this cost but not greater than 160 percent of the national average for this cost as calculated pursuant to § 54.1002(c) multiplied by the number of working loops reported in § 36.611(h) for the study area;
 - (2) Thirty percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 160 percent of the national average for this cost but not greater than 200 percent of the national average for this cost as calculated pursuant to § 54.1002(c) multiplied by the number of working loops reported in § 36.611(h) for the study area;
 - (3) Sixty percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 200 percent of the national average for this cost but not greater than 250 percent of the national average for this cost as calculated pursuant to § 54.1002(c) multiplied by the number of working loops reported in § 36.611(h) for the study area; and
 - (4) Seventy-five percent of the study area average unseparated loop cost per working loop as calculated pursuant to § 36.622(b) in excess of 250 percent of the national average for this cost as calculated pursuant to § 54.1002(c) multiplied by the number of working loops reported in § 36.611(h) for the study area.
- (c) The national average unseparated loop cost for purposes of calculating expense adjustments in § 54.1002(a)-(b) is frozen at \$240.00.

54.1003 Disaggregation and targeting of high-cost support

- (a) All non-rural insular incumbent local exchange carriers on or before **[270 days after the effective date of the Order]** must select a disaggregation path as described in paragraphs (b), (c), or (d) of this section. In study areas in which a competitive carrier was designated as a competitive eligible telecommunications carrier prior to **[effective date of Order]**, the non-rural insular incumbent local exchange carrier may only disaggregate support pursuant to paragraphs (b), (c), or (d)(1)(iii) of this section. A non-rural insular incumbent local exchange carrier failing to select a disaggregation path as described in paragraphs (b), (c), or (d) of this section by **[270 days after the effective date of the Order]**, will not be permitted to disaggregate and target federal high-cost support unless ordered to do so by a state commission as that term is defined in § 54.5.
- (b) Path 1: Carriers Not Disaggregating and Targeting High-Cost Support:
 - (1) A carrier may certify to the state commission that it will not disaggregate and target high-cost universal service support.

- (2) A carrier's election of this path becomes effective upon certification by the carrier to the state commission.
 - (3) This path shall remain in place for such carrier for at least four years from the date of certification to the state commission except as provided in paragraph (b)(4) of this section.
 - (4) A state commission may require, on its own motion, upon petition by an interested party, or upon petition by a non-rural insular incumbent local exchange carrier, the disaggregation and targeting of support under paragraphs (c) or (d) of this section.
 - (5) A carrier not subject to the jurisdiction of a state, *e.g.*, certain tribally owned carriers, may select Path 1, but must certify to the Federal Communications Commission as described in paragraphs (b)(1) through (4) of this section.
- (c) Path 2: Carriers Seeking Prior Regulatory Approval for the Disaggregation and Targeting of Support:
 - (1) A carrier electing to disaggregate and target support under this paragraph must file a disaggregation and targeting plan with the state commission.
 - (2) Under this paragraph a carrier may propose any method of disaggregation and targeting of support consistent with the general requirements detailed in paragraph (e) of this section.
 - (3) A disaggregation and targeting plan under this paragraph becomes effective upon approval by the state commission.
 - (4) A carrier shall disaggregate and target support under this path for at least four years from the date of approval by the state commission except as provided in paragraph (c)(5) of this section.
 - (5) A state commission may require, on its own motion, upon petition by an interested party, or upon petition by a non-rural insular incumbent local exchange carrier, the disaggregation and targeting of support in a different manner.
 - (6) A carrier not subject to the jurisdiction of a state, *e.g.*, certain tribally owned carriers, may select Path 2, but must seek approval from the Federal Communications Commission as described in paragraphs (c)(1) through (5) of this section.
- (d) Path 3: Self-Certification of the Disaggregation and Targeting of Support:

- (1) A carrier may file a disaggregation and targeting plan with the state commission along with a statement certifying one of the following:
 - (i) It has disaggregated support to the wire center level; or
 - (ii) It has disaggregated support into no more than two cost zones per wire center; or
 - (iii) That the carrier's disaggregation plan complies with a prior regulatory determination made by the state commission.
- (2) Any disaggregation plan submitted pursuant to this paragraph must meet the following requirements:
 - (i) The plan must be supported by a description of the rationale used, including the methods and data relied upon to develop the disaggregation zones, and a discussion of how the plan complies with the requirements of this paragraph. Such filing must provide information sufficient for interested parties to make a meaningful analysis of how the carrier derived its disaggregation plan.
 - (ii) The plan must be reasonably related to the cost of providing service for each disaggregation zone within each disaggregated category of support.
 - (iii) The plan must clearly specify the per-line level of support for each category of high-cost universal service support provided pursuant to § 54.1002 of this chapter in each disaggregation zone.
 - (iv) If the plan uses a benchmark, the carrier must provide detailed information explaining what the benchmark is and how it was determined. The benchmark must be generally consistent with how the total study area level of support for each category of costs is derived to enable a competitive eligible telecommunications carrier to compare the disaggregated costs used to determine support for each cost zone.
- (3) A carrier's election of this path becomes effective upon certification by the carrier to the state commission.
- (4) A carrier shall disaggregate and target support under this path for at least four years from the date of certification to the state commission except as provided in paragraph (d)(5) of this section.
- (5) A state commission may require, on its own motion, upon petition by an interested party, or upon petition by a non-rural insular incumbent local exchange

carrier, modification to the disaggregation and targeting of support selected under this path.

- (6) A carrier not subject to the jurisdiction of a state, e.g., certain tribally owned carriers, may select Path 3, but must certify to the Federal Communications Commission as described in paragraphs (d)(1) through (5) of this section.
- (e) Additional Procedures Governing the Operation of Path 2 and Path 3: Disaggregation and targeting plan adopted under paragraphs (c) or (d) of this section shall be subject to the following general requirements:
- (1) Support available to the carrier's study area under its disaggregation plan shall equal the total support available to the study area without disaggregation.
 - (2) The ratio of per-line support between disaggregation zones for each disaggregated category of support shall remain fixed over time, except as changes are allowed pursuant to paragraph (c) and (d) of this section.
 - (3) The ratio of per-line support shall be publicly available.
 - (4) Per-line support amounts for each disaggregation zone shall be recalculated whenever the carrier's total annual support amount changes using the changed support amount and lines at that point in time.
 - (5) Per-line support for each category of support in each disaggregation zone shall be determined such that the ratio of support between disaggregation zones is maintained and that the product of all of the carrier's lines for each disaggregation zone multiplied by the per-line support for those zones when added together equals the sum of the carrier's total support.
 - (6) Until a competitive eligible telecommunications carrier is certified in a study area, monthly payments to the incumbent carrier will be made based on total annual amounts for its study area divided by 12.
 - (7) When a competitive eligible telecommunications carrier is certified in a study area, per-line amounts used to determine the competitive eligible telecommunications carrier's disaggregated support shall be based on the incumbent carrier's then-current total support levels, lines, and disaggregated support relationships.
- (f) Submission of Information to the Administrator:
- (1) A carrier certifying under paragraph (b) of this section that it will not disaggregate and target high-cost universal service support shall submit to the Administrator a copy of the certification submitted to the state commission, or the Federal Communications Commission, when not subject to state jurisdiction.

- (2) A carrier electing to disaggregate and target support under paragraph (c) of this section shall submit to the Administrator a copy of the order approving the disaggregation and targeting plan submitted by the carrier to the state commission, or the Federal Communications Commission, when not subject to state jurisdiction, and a copy of the disaggregation and targeting plan approved by the state commission or the Federal Communications Commission.
- (3) A carrier electing to disaggregate and target support under paragraph (d) of this section shall submit to the Administrator a copy of the self-certification plan including the information submitted to the state commission pursuant to paragraphs (d)(2)(i) and (d)(2)(iv) of this section or the Federal Communications Commission.
- (4) A carrier electing to disaggregate and target support under paragraph (c) or (d) of this section must submit to the Administrator maps which precisely identify the boundaries of the designated disaggregation zones of support within the carrier's study area.

54.1004 State certification of support for non-rural insular incumbent local exchange carriers

- (a) State certification. States that desire non-rural insular incumbent local exchange carriers and/or eligible telecommunications carriers serving lines in the service area of a non-rural insular incumbent local exchange carrier within their jurisdiction to receive support pursuant to § 54.1002 of this chapter must file an annual certification with the Administrator and the Commission stating that all federal high-cost support provided to such carriers within that State will be used only for the provision, maintenance, and upgrading of facilities and services for which the support is intended. Support provided pursuant to § 54.1002 of this chapter shall only be provided to the extent that the State has filed the requisite certification pursuant to this section.
- (b) Certification format. A certification pursuant to this section may be filed in the form of a letter from the appropriate regulatory authority for the State, and shall be filed with both the Office of the Secretary of the Commission clearly referencing CC Docket No. 96-45, and with the Administrator of the high-cost universal service support mechanism, on or before the deadlines set forth in paragraph (c) of this section. If provided by the appropriate regulatory authority for the state, the annual certification must identify which carriers in the State are eligible to receive federal support during the applicable 12-month period, and must certify that those carriers will only use support for the provision, maintenance, and upgrading of facilities and services for which support is intended. A State may file a supplemental certification for carriers not subject to the State's annual certification. All certificates filed by a State pursuant to this section shall become part of the public record maintained by the Commission.
- (c) Filing Deadlines. Upon the filing of the certification described in paragraph (b) of this section, support shall be provided pursuant to the following schedule:

- (1) Certifications filed on or before October 1. Carriers for which certifications are filed on or before October 1 shall receive support pursuant to § 54.1002 of this chapter, in the first, second, third, and fourth quarters of the succeeding year.
- (2) Certifications filed on or before January 1. Carriers for which certifications are filed on or before January 1 shall receive support pursuant to § 54.1002 of this chapter, in the second, third, and fourth quarters of that year. Such carriers shall not receive support pursuant to § 54.1002 of this chapter in the first quarter of that year.
- (3) Certifications filed on or before April 1. Carriers for which certifications are filed on or before April 1 shall receive support pursuant § 54.1002 of this chapter, in the third and fourth quarters of that year. Such carriers shall not receive support pursuant to § 54.1002 of this chapter in the first and second quarters of that year.
- (4) Certifications filed on or before July 1. Carriers for which certifications are filed on or before July 1 shall receive support pursuant to § 54.1002 of this chapter, in the fourth quarter of that year. Such carriers shall not receive support pursuant to § 54.1002 of this chapter in the first, second, or third quarters of that year.
- (5) Certifications filed after July 1. Carriers for which certifications are filed after July 1 shall not receive support pursuant to § 54.1002 of this chapter, in that year.
- (6) Newly designated eligible telecommunications carriers. Notwithstanding the deadlines in paragraph (d) of this section, a carrier shall be eligible to receive support pursuant to § 54.1002 of this chapter, whichever is applicable, as of the effective date of its designation as an eligible telecommunications carrier under Section 214(e)(2) or (e)(6), provided that it files the certification described in paragraph (b) of this section or the state commission files the certification described in paragraph (a) of this section within 60 days of the effective date of the carrier's designation as an eligible telecommunications carrier. Thereafter, the certification required by paragraphs (a) or (b) of this section must be submitted pursuant to the schedule in paragraph (d) of this section.

§ 36.611 Submission of information to the National Exchange Carrier Association

Add new second sentence of (h) ...

- (h) For non-rural insular incumbent local exchange carrier, as that term is defined in §54.5 of this chapter, the number of working loops for each study area.

§ 36.611 Submission of information to the National Exchange Carrier Association

Change first sentence of (a) to ...

- (a) Any rural telephone company, as that term is defined in §51.5 of this chapter, or non-rural insular incumbent local exchange carrier, as that term is defined in §54.5 of this chapter, may update the information submitted to the National Exchange Carrier Association (NECA) on July 31st pursuant to §§36.611(a) through (h) one or more times annually on a rolling year basis according to the schedule, except that rural telephone companies or non-rural insular incumbent local exchange carrier in service areas where an eligible telecommunications carrier has initiated service and has reported line count data pursuant to §54.307(c) of this chapter must update the information submitted to NECA on July 31st pursuant to §36.611(h) according to the schedule.

§ 54.5 Terms and Definitions

Add

Insular area. For purposes of the non-rural insular support mechanism, “insular area” includes the territories or commonwealths of the United States.

Non-rural insular incumbent local exchange carrier. Non-rural insular incumbent local exchange carrier is a carrier that provides service to an “insular area,” and that meets the definition of “incumbent local exchange carrier,” but does not meet the definition of “rural telephone company,” as those terms are defined in §§ 51.5 and 54.5 of this chapter.

§54.307 Support to a competitive eligible telecommunications carrier

Add to the end of (a)(1)

- (a) ... A competitive eligible telecommunications carrier serving loops in the service area of a non-rural insular incumbent local exchange carrier, as that term is defined in §54.5 of this chapter, shall receive support for each line it serves in a particular service area based on the support the incumbent LEC would receive for each such line, disaggregated by cost zone if disaggregation zones have been established within the service area pursuant to §54.1002 of this subpart.

Add in (b)

- (b) ... For a competitive eligible telecommunications carrier serving loops in the service area of a non-rural insular incumbent local exchange carrier, as that term is defined in § 54.5 of this chapter, the carrier must report, by customer class, the number of working loops it serves in the service area, disaggregated by cost zone if disaggregation zones have been established within the service area pursuant to §54.1002.

§54.309 Calculation and distribution of forward-looking support for non-rural carriers

Add as second sentence of (a)

- (a) ... Beginning [**Effective Date of Order**], non-rural insular incumbent local exchange carriers, and eligible telecommunications carriers serving lines in the service areas of non-rural insular incumbent local exchange carriers, shall only receive support pursuant to Subpart L in this chapter.